GREENVILLE UTILITIES COMMISSION

GREENVILLE, NORTH CAROLINA

QUESTIONS AND ANSWERS FOR RFB 20-34 1,000 kW PEAK SHAVING GENERATION SYSTEM DUE 08.19.2020 at 3:00 PM

- Page 4, Item # 13: M/WBE Requirements. GUC does not state a % of M/WBE needed. Please provide clarification or a copy of the GUC M/WBE policy. Refer to page 7 of 36 in bid.
- 2. Page 7, Scope Paragraph 1: State voltage as 15kV. Please clarify so that we can quote the actual voltage (ie, 12.47kV, 13.2kV, 13.8kV, etc). 12.47 kV
- Page 8, Paragraph 2.4: The RFP states bidder should provide "Catalog numbers, manufacturer, ratings, characteristics, types, etc., of all materials and equipment included" Is GUC looking for this at the major equipment level only? I.E. engines, transformers, switchgear, breakers, etc. Major equipment/components
- 4. Page 9, Paragraph 2.17: It appears we are to include all permits including the air permit. Please verify. Permits required by NCUC or environmental regulatory agencies are excluded from this requirement.
- Page 13, Paragraph 6.6: Verify that bidder needs to do all conduits between Gens/CH/transformer. Will the Owner pick up conduit run from transformer to pole connection? Materialman is responsible for conduit/cabling from the GEN to TX. Materialman shall provide stub outs for Owner conduit beneath foundations
- 6. Page 19, Paragraph 10.1.3: Does a single engine have to achieve 20% of the peak shaving load or can this be achieved by using multiple engines? Multiple
- 7. Page 32, Paragraph 12.6.3: Spec calls for Cutler Hammer Generator breaker. Will Square D or other equivalents be acceptable? GUC will evaluate alternatives
- 8. Page 53: Is the bidder required to demo and remove existing generator? No
- 9. Is there an owner's opinion of probable cost for the project? No
- There is mention of geotechnical engineering in the specs (section 16.1). Has there been any soil analysis done in the past? Is there any more detail to this requirement?
 Previous report attached. If required, materialman is responsible for geotechnical engineering.
- 11. There is mention of the owner furnishing and installing medium voltage cabling to utility pad mount transformer (section 18.5). Is the expectation the Materialman provides the raceway and Owner provides the cabling or does the Owner provide all installation components (duct bank/raceway/conductors) for the MV voltage portion of this installation? Owner responsible for cable and duct bank
- There is mention of the owner furnishing and installing fiber cabling to control house (section 18.6). Is the expectation the Materialman provides the raceway and Owner provides the cabling or does the Owner provide all installation components for the Fiber portion of this installation?
 Owner provides all components from Control House to GEN

- 13. Please confirm if Owner or Materialman is supplying the Gas Fiber Cabinet. Owner
- 14. There is mention of the Owner furnishing and installing duct bank (section 6.6) for the site. Is the expectation the Materialman only provides the the cabling or does the Materialman provide all installation components (duct bank/raceway/conductors) for the 480V portion of this installation? We assume the latter but did want confirmation.

Materialman provides 480V portion. Materialman shall also provide 1' stub outs from foundation for Owner use where applicable (i.e. Tx Pad) per specs.

- 15. GP did see a performance / payment bond form in the documents but no mention of performance / payment bond. We assume this project will be bonded but did want to confirm. Yes
 - Paragraph 11.3 refers to the alternator to be furnished with form wound coils. Will random wound coils that are VPI insulated and meet the specified insulation class, temp rise and pitch be accepted? Form wound coils are typically found in medium voltage applications or on winding in off shore installations.

GUC will evaluate alternatives

- 2. Paragraph 12.6.3 notes that an Eaton/Cutler Hammer DS breaker. We would request that a Sq D equal breaker be allowed. GUC will evaluate alternatives
- 3. Would Greenville Utilities accept the installation of the generator set breaker inside of the generator enclosure in lieu of installation in the gear as specified? We would propose a freestanding electrically operated power breaker mounted in a NEMA 1 enclosure installed in the gen enclosure. All required NEC safe work clearances would be maintained. GUC will evaluate alternatives
- 4. Paragraph 12.1 requires the paralleling switchgear to be listed as UL -1558. Will a UL 891 design switchgear be accepted? GUC will evaluate alternatives
- 5. Paragraph 12.2 requires the paralleling gear to be in a NEMA 3R outdoor enclosure. If installed inside of the generator enclosure or in a control house will a NEMA 1 enclosure be approved? GUC will evaluate alternatives
- 6. Paragraph 12.7 specifies a Woodward EasY-gen 3000 paralleling generator controller. The Cummins equipment uses our own Power Command Control 3.3 which has equal or better controller function than the EasY gen controller. Will Greenville Utilities accept the Cummins control as an alternative paralleling control? GUC will evaluate alternatives
- Paragraph 8.4 requires the generator enclosure to be hot dipped galvanized metal to be used. Will other materials such as aluminum or galvalume be allowed as alternative materials? GUC will evaluate alternatives
- 8. Paragraph 10.2.5 specifies a Woodward governor on the engine. Cummins uses a Cummins governor. Will the Cummins governor be accepted by the GUC? GUC will evaluate alternatives
- 9. Is the GUC Control house shown on the plans existing or will it be new? If existing can it be used to house the switchgear master control? Existing, no
- 10. Please clarify the testing expectation in Paragraph 10.12.1. Is the intent to have testing performed on an open package at our factory or as a fully assembled package at our enclosure manufacturer's facility? Assembled package
- 11. There is reference to a standby operation for the equipment. Is there a sequence of operation for operations in a standby mode? Disregard, peak shaving only

- 12. Please clarify the intention for coverage of items for the 10 year warranty. The specification states all equipment. Are fabricated items i.e skids, enclosures and enclosure accessories considered equipment? No, major generator components
- The Scope of work for the project starting on page 8 of the PDF file calls out the engine shall consist of one or multiple engines with nameplates no larger than 2,000 kW each. Please clarify the maximum kW of each engine for this project. Specifications are for a 1,000 kW generator consisting of one or multiple engines.